LISTING OF CLAIMS

1. (previously presented) A method for testing a plurality of channels associated with a forward link in a wireless data communication system, comprising:

receiving a first message having included therein test settings selected from among a plurality of possible test settings for one or more channels comprising a reverse traffic channel, one or more auxiliary channels, or a combination thereof, wherein the test settings selected comprise indications for configuring the reverse traffic channel, one or more auxiliary channels, or a combination thereof and indications of loop back packet transmission procedures to be performed during testing;

configuring the one or more channels based on the selected test settings in the first message;

receiving test packets via a forward traffic channel;

transmitting loop back packets via the reverse traffic channel if indicated by the selected test settings, wherein the loop back packets comprise data for the received test packets; and

transmitting signaling data via the one or more auxiliary channels if indicated by the selected test settings to test the one or more auxiliary channels.

2. (original) The method of claim 1, wherein each loop back packet includes data descriptive of one or more test packets.

3. (canceled)

4. (canceled)

5. (previously presented) A memory communicatively coupled to a digital signal processing device (DSPD) capable of interpreting digital information to:

receive a first message having included therein test settings selected from among a plurality of possible test settings for one or more channels comprising a reverse traffic channel, one or more auxiliary channels, or a combination thereof, wherein the test settings selected comprise indications for configuring the reverse traffic channel, one or more auxiliary channels, or a combination thereof and indications of loop back packet transmission procedures to be performed during testing;

configure the one or more channels based on the test settings in the first message;

receive test packets via a forward traffic channel;

transmit a plurality of loop back packets via the reverse traffic channel if indicated by the selected test settings, wherein one loop back packet is formed for each particular time interval, and wherein the loop back packets comprise data for the received test packets; and

transmit signaling data via the one or more auxiliary channels if indicated by the selected test settings to test the one or more auxiliary channels.

6. (currently amended) A method for testing one or more channels in a wireless data communication system, comprising:

receiving a first data transmission comprising test packets of known test data via a first channel during an observation interval;

identifying parameter values descriptive of the test packets received in the first data transmission during the observation interval, wherein the parameter values for each test packet comprise at least one of a serving sector from which the test packet was received, a sequence number of the test packet, and a length of the test packet;

forming a second data transmission comprising the identified parameter values for all test packets received during the observation interval; and

transmitting the second data transmission via a second channel.

7. (original) The method of claim 6, wherein the first channel is a forward traffic channel and the second channel is a reverse traffic channel.

8. (previously presented) The method of claim 7, wherein the second data transmission comprises a plurality of loop back packets, and wherein the loop back packets include the parameter values descriptive of the test packets.

9. (original) The method of claim 8, wherein one loop back packet is formed for each particular time interval.

10. (original) The method of claim 8, wherein each loop back packet covers zero or more test packets.

11. (previously presented) The method of claim 8, wherein each loop back packet includes a field indicative of a specific protocol to which the loop back packet belongs.

12. (previously presented) The method of claim 8, wherein each loop back packet includes a field indicative of a specific packet type for the loop back packet.

13. (previously presented) The method of claim 9, wherein each loop back packet includes a field indicative of a start of a specific time interval covered by the loop back packet.

14. (previously presented) The method of claim 10, wherein each loop back packet includes a field indicative of whether any loop back packets were lost due to buffer overflow.

15. (previously presented) The method of claim 10, wherein each loop back packet includes a field indicative of a specific number of records included in the loop back packet, wherein one record is included for each test packet covered by the loop back packet.

16. (original) The method of claim 10, wherein each loop back packet includes one record for each test packet covered by the loop back packet, each record including a set of fields for a set of parameter values identified for the corresponding covered test packet.

17. (previously presented) The method of claim 16, wherein each record includes a field indicative of whether or not the record includes a sequence number of a signaling message used to assign the first channel.

18. (previously presented) The method of claim 17, wherein each record includes a field indicative of the sequence number for the signaling message.

19. (previously presented) The method of claim 16, wherein each record includes a field indicative of a transmission source of the test packet covered by the record.

20. (previously presented) The method of claim 16, wherein each record includes a field indicative of a time period over which the test packet covered by the record was received.

21. (previously presented) The method of claim 16, wherein each record includes a field indicative of a number of MAC packets received in a Physical Layer packet containing the test packet covered by the record.

22. (previously presented) The method of claim 16, wherein each record includes a field indicative of whether or not a sequence number for the covered test packet is included in the record.

23. (previously presented) The method of claim 22, wherein each record includes a field indicative of a sequence number for the covered test packet.

24. (original) The method of claim 8, wherein each loop back packet includes a parameter value indicative of omission of one or more test packets.

25. (previously presented) The method of claim 8, within each test packet includes a field indicative of a specific protocol to which the test packet belongs.

26. (previously presented) The method of claim 8, wherein each test packet includes a field indicative of a specific packet type for the test packet.

27. (previously presented) The method of claim 8, wherein each test packet includes a field indicative of a sequence number of the test packet.

28. (currently amended) A memory communicatively coupled to a digital signal processing device (DSPD) capable of interpreting digital information to:

receive a first data transmission during an observation interval via a first channel, wherein the first data transmission comprises a plurality of packets of known test data;

identify parameter values descriptive of the test packets received in the first data transmission during the observation interval, wherein the parameter values for each test packet comprise at least one of a serving sector from which the test packet was received, a sequence number of the test packet, and a length of the test packet;

form a second data transmission comprising the identified parameter values for <u>all</u> test packets received during the observation interval; and

transmit the second data transmission via a second channel.

29. (currently amended) A method for testing one or more channels in a wireless data communication system, comprising:

receiving a plurality of test packets of known test data during an observation interval via a forward traffic channel;

identifying a transmission source and a sequence number of each received test packet received during the observation interval;

forming a plurality of loop back packets for the plurality of received test packets, wherein each loop back packet covers zero or more test packets, and includes the transmission source and the sequence number of [[any]] every covered test packet received during the observation interval; and

transmitting the loop back packets via a reverse traffic channel.

30. (currently amended) A method for testing one or more channels in a wireless data communication system, comprising:

sending a first data transmission via a first channel, wherein the first data transmission comprises test packets of known test data;

receiving a second data transmission via a second channel, wherein the second data transmission includes parameter values descriptive of [[the]] all test packets in the first data transmission received during an observation interval, and further comprises a record for each test packet correctly received during the observation interval, wherein the parameter values are configured to be used to update a plurality of variables employable in testing the one or more channels;

updating a plurality of variables based on the parameter values included in the second data transmission; and

determining a packet error rate based on information included in the second data transmission.

31. (currently amended) A method for testing one or more channels in a wireless data communication system, comprising:

sending a plurality of test packets of known test data via a forward traffic channel;

receiving a plurality of loop back packets via a reverse traffic channel, wherein each loop back packet covers zero or more test packets received during an observation interval,

and includes a transmission source and a sequence number of [[any]] every covered test packet received during the observation interval;

updating a plurality of variables for a plurality of transmission sources based on the transmission source and the sequence number of any test packet covered by the received loop back packets; and

determining a packet error rate based on information included in the loop back packets.

32. (previously presented) A method for testing forward link for specific configuration of one or more auxiliary channels in a wireless data communication system, comprising:

receiving a first message having included therein test settings selected from among a plurality of possible test settings for one or more auxiliary channels used to carry signaling for data transmission on the forward link for the one or more auxiliary channels, wherein the test settings selected comprise indications for configuring each auxiliary channel and indications of procedures to be performed by each auxiliary channel during testing;

configuring each auxiliary channel based on test settings applicable to the auxiliary channel; and

transmitting each configured auxiliary channel in accordance with the applicable test settings to test the configured auxiliary channel.

33. (original) The method of claim 32, wherein each test setting is provided via a respective record in the first message.

34. (previously presented) The method of claim 32, wherein the one or more auxiliary channels comprise at least one of an acknowledgement (ACK) channel and a data rate control (DRC) channel.

35. (previously presented) The method of claim 32, wherein the first message includes a test setting for a particular bit value to be transmitted on an acknowledgment (ACK) channel.

36. (previously presented) The method of claim 32, wherein the first message includes a test setting for a particular value to be transmitted on a data rate control (DRC) channel.

37. (previously presented) The method of claim 32, wherein the first message includes a test setting for a particular cover to be used for a data rate control (DRC) channel.

38. (previously presented) The method of claim 32, wherein the first message includes a test setting indicative of maintenance of a test mode in event of a connection closure or a lost connection.

39. (currently amended) A memory communicatively coupled to a digital signal processing device (DSPD) capable of interpreting digital information to:

send a plurality of test packets of known test data ~~during an observation interval~~ via a forward traffic channel;

receive a plurality of loop back packets via a reverse traffic channel during an observation interval, wherein each loop back packet covers zero or more test packets, and includes a transmission source and a sequence number of ~~any covered~~ every test packet [[sent]] received during the observation interval; and

update a plurality of variables for a plurality of transmission sources based on the transmission source and the sequence number of any test packet sent during the observation interval and covered by the received loop back packets.

40. (previously presented) A method for testing a link in a wireless data communication system, comprising:

collecting a first statistic for a first parameter while in an idle state and not exchanging data via the link, wherein collecting the first statistic occurs while performing testing;

collecting a second statistic for a second parameter different from the first parameter while in a connected state and exchanging data via the link, wherein at least the first statistic or the second statistic facilitates determination of a packet error rate;

receiving a first message requesting the first or second statistic; and

sending a second message with the requested first or second statistic.

41. (previously presented) The method of claim 40, wherein the first parameter corresponds to changes in active set pilot while in the idle state.

42. (previously presented) The method of claim 40, wherein the second parameter corresponds to changes in serving sector while in the connected state.

43. (original) The method of claim 40, further comprising:

receiving a third message to reset the first and second statistics; and

resetting the first and second statistics in response to receiving the third message.

44. (previously presented) A memory communicatively coupled to a digital signal processing device (DSPD) capable of interpreting digital information to:

collect a first statistic for a first parameter while in an idle state and not exchanging data via the link, wherein collecting the first statistic occurs while performing a testing function;

collect a second statistic for a second parameter different from the first parameter while in a connected state and exchanging data via the link, wherein at least the first statistic or the second statistic facilitates determination of a packet error state;

receive a first message requesting the first or second statistic; and

send a second message with the requested first or second statistic.

45. (previously presented) A method for testing a traffic channel in a wireless data communication system, comprising:

receiving a first message having included therein test settings for the traffic channel;

forming a plurality of test packets for transmission on the traffic channel, wherein at least one test packet individually comprises information corresponding to a range of rates usable for testing the traffic channel;

selecting rates for transmitting the test packets within the range of rates based on a rate selection scheme in which the selected rates are varied in accordance with a set of rules for the rate selection scheme; and

transmitting the test packets at the selected rates on the traffic channel.

46. (original) The method of claim 45, wherein the first message includes a minimum rate and a maximum rate for the test packets.

47. (original) The method of claim 46, wherein the selected rates for the test packets are cycled between the minimum and maximum rates.

48. (original) The method of claim 47, wherein the selected rates for the test packets are further limited by a maximum rate specified by a media access control (MAC) protocol.

49. (original) The method of claim 45, wherein the first message includes an indication of maintenance of a test mode on the traffic channel in event of a connection closure or a lost connection.

50. (previously presented) The method of claim 45, wherein each test packet includes a field indicative of a specific protocol to which the test packet belongs.

51. (previously presented) The method of claim 45, wherein each test packet includes a field indicative of a specific packet type for the test packet.

52. (previously presented) The method of claim 45, wherein each test packet includes a field indicative of a particular time instance when the test packet was generated.

53. (previously presented) The method of claim 45, wherein each test packet includes a field indicative of whether or not a test packet was lost due to buffer overflow.

54. (previously presented) The method of claim 45, wherein each test packet includes a field for each of the plurality of rates being tested, and wherein the field for each rate includes a sequence number of a test packet last transmitted at the corresponding rate.

55. (original) The method of claim 54, wherein each test packet includes fields for all possible reverse link rates.

56. (previously presented) A memory communicatively coupled to a digital signal processing device (DSPD) capable of interpreting digital information to:

receive a first message having included therein test settings for the traffic channel;

form a plurality of test packets for transmission on the traffic channel, wherein at least one test packet individually comprises information corresponding to a range of rates usable for testing the traffic channel;

select rates for transmitting the test packets within the range of rates based on a rate selection scheme in which the selected rates are varied in accordance with a set of rules for the rate selection scheme; and

transmit the test packets at the selected rates on the traffic channel.

57. (previously presented) A method for testing a reverse traffic channel in a wireless data communication system, comprising:

receiving a first message having included therein a minimum rate and a maximum rate for data transmission on the reverse traffic channel;

forming a plurality of test packets for transmission on the reverse traffic channel, wherein each test packet includes a sequence number of a test packet last transmitted at each of a plurality of possible rates;

selecting rates for the test packets based on a rate selection scheme and limited by the minimum and maximum rates, wherein the selected rates are varied in accordance with a set of rules for the rate selection scheme; and

transmitting the test packets at the selected rates on the reverse traffic channel.

58. (original) The method of claim 57, further comprising:

queuing the formed test packets.

59. (previously presented) A method for testing a reverse traffic channel in a wireless data communication system, comprising:

sending a first message having included therein test settings selected for the reverse traffic channel;

receiving a plurality of test packets at a plurality of rates on the reverse traffic channel, wherein at least one test packet individually comprises information corresponding to a range of rates usable for testing the reverse traffic channel;

updating a plurality of variables maintained for the plurality of rates based on the rates of the received test packets; and

determining a packet error rate based on the information included in the plurality of test packets for the plurality of rates.

60. (original) The method of claim 59, further comprising: for each received test packet, updating a first variable based on a sequence number of the test packet.

61. (currently amended) A terminal in a wireless data communication system comprising:

a receive data processor operative to receive a plurality of test packets of known test data during an observation interval via a forward traffic channel;

a controller operative to identify a transmission source and a sequence number of each received test packet and to form a loop back packet covering all test packets ~~plurality of loop back packets for the plurality of received test packets~~ received during the observation interval, wherein each loop back packet ~~covers zero or more test packets received during the observation interval, and~~ includes the transmission source and the sequence number of [[any]] every covered test packet received during the observation interval; and

a transmit data processor operative to process the loop back packets for transmission via a reverse traffic channel.

62. (original) The terminal of claim 61, further comprising:

a buffer operative to queue the loop back packets.

63. (currently amended) An apparatus in a wireless data communication system comprising:

means for receiving a plurality of test packets of known test data during an observation interval via a forward traffic channel;

means to identify a transmission source and a sequence number of each test packet received during the observation interval;

means for forming a plurality of loop back packets ~~for the plurality of received test packets~~, wherein each loop back packet covers ~~zero or more~~ all test packets received during the observation interval, and each loop back packet includes the transmission source and the sequence number of [[any]] every covered test packet received during the observation interval; and

means for processing the loop back packets for transmission via a reverse traffic channel.

64. (previously presented) A terminal in a wireless data communication system comprising:

a receive data processor operative to receive a first message having included therein a minimum rate and a maximum rate for data transmission on a reverse traffic channel;

a controller operative to form a plurality of test packets for transmission on the reverse traffic channel, wherein each test packet includes a sequence number of a test packet last transmitted at each of a plurality of possible rates, and to select rates for the test packets based on a rate selection scheme and limited by the minimum and maximum rates, wherein the selected rates are varied in accordance with a set of rules for the rate selection scheme; and

a transmit data processor operative to process the test packets for transmission at the selected rates on the reverse traffic channel.

65. (original) The terminal of claim 61, further comprising: a buffer operative to queue the formed test packets.

66. (previously presented) An apparatus in a wireless data communication system comprising:

means for receiving a first message having included therein a minimum rate and a maximum rate for data transmission on a reverse traffic channel;

means for forming a plurality of test packets for transmission on the reverse traffic channel, wherein each test packet includes a sequence number of a test packet last transmitted at each of a plurality of possible rates;

means for selecting rates for the test packets based on a rate selection scheme and limited by the minimum and maximum rates, wherein the selected rates are varied in accordance with a set of rules for the rate selection scheme; and

means for processing the test packets for transmission at the selected rates on the reverse traffic channel.

67. (currently amended) An access point in a wireless data communication system comprising:

a transmit data processor operative to process a plurality of test packets of known test data for transmission via a forward traffic channel;

a receive data processor operative to process a plurality of loop back packets received via a reverse traffic channel, wherein each loop back packet covers zero or more test packets received during an observation interval, and includes a transmission source and a sequence number of [[any]] every covered test packet ~~transmitted~~ received during the observation interval; and

a controller operative to update a plurality of variables for a plurality of transmission sources based on the transmission source and the sequence number of [[any]] every test packet received during the observation interval and covered by the received loop back packets.

68. (currently amended) An apparatus in a wireless data communication system comprising:

means for processing a plurality of test packets of known test data for transmission via a forward traffic channel;

means for processing a plurality of loop back packets received via a reverse traffic channel, wherein each loop back packet covers zero or more test packets received during an observation interval, and includes a transmission source and a sequence number of [[any]] every covered test packet received during the observation interval; and

means for updating a plurality of variables for a plurality of transmission sources based on the transmission source and the sequence number of [[any]] every test packet received during the observation interval and covered by the received loop back packets.